

REMARKS

Claims 28-47 remain pending in the application and stand rejected.

Reconsideration and allowance of the claims is respectfully requested.

The Office action objected to the drawings. Specifically, the drawings were objected to for failing to illustrate "a groove axis." Applicants propose a correction to FIG. 2 to show groove axis "I." The groove axis is described at page 10, lines 2-20 of the Specification, and no new matter has been added. Specifically, the grooves are described as being arranged perpendicular to the lightsource 12, shown in FIG. 1, illuminating an input edge surface 21. Optical structures 40 are described to be formed on the grooves with decreasing amplitude from a first edge 36 toward a second edge 38. And, in the described embodiment, the optical power is described as decreasing as a function of distance from the first edge 36, and finally, the first edge is described as being arranged to be disposed substantially adjacent the input edge surface 21. Thus, it is clear the prism structures have a groove axis, the groove axis extends from a first edge toward a second edge, the first edge is arranged to be disposed adjacent an input edge of the lightguide, and that the groove axes extend substantially perpendicularly to the input edge. Entry of the proposed drawing correction is respectfully solicited.

Claims 28, 36 and 45 are rejected under 35 U.S.C. § 112, second paragraph.

The examiner alleges the recitation of "the groove axes are arranged to be disposed substantially perpendicular to the edge surface is indefinite because it is not clear whether the groove axes are to be perpendicular to the light source or to the edge surface of the light guide. Applicants respectfully traverse the rejection. The claim is clear. The lightguide is described in the preamble as having an input edge surface. For all intents and purposes the input edge surface and the lightsource will be parallel in practical application. Nonetheless,

Amendments to the Claims:

C2 28. (previously added) An optical film for use with an edge illuminated lightguide having an input edge surface and an output surface, the optical film comprising:

- a first surface;
- a second surface opposing the first surface;
- a plurality of prism grooves formed in the first surface, the prism grooves each having a groove axis and each groove axis being substantially parallel to each other groove axis, wherein the groove axes are arranged to be disposed substantially perpendicular to the input edge surface; and
- each of the plurality of prism grooves being formed to include a plurality of optical structures, the plurality of optical structures to provide optical power to the prism groove, each optical structure having a characteristic, and the characteristic varying as a function of the location along the groove axis from the input edge surface.

29. (previously added) The optical film of claim 28, wherein the characteristic comprises one of the group of characteristics comprising: amplitude, pitch and aspect ratio.

30. (previously added) The optical film of claim 28, wherein the optical structures comprise optical structures selected from the group of optical structures comprising: prisms, lines, dots, squares and ellipses.

31. (previously added) The optical film of claim 28, wherein the characteristic comprises amplitude, and wherein the amplitude varies along the groove axis.

32. (previously added) The optical film of claim 28, wherein variation in the optical structures of adjacent prism grooves is one of in-phase and out-of-phase.

C2 33. (previously added) The optical film of claim 28, wherein the optical power is arranged to be greater along the groove axis at a location arranged to be nearer the input edge surface.

34. (previously added) The optical film of claim 28, wherein the optical structures comprise discrete optical structures formed in the prism groove.

35. (previously added) The optical film of claim 28, wherein the optical structures comprise continuous structures formed along the length of the prism groove.

36. (previously added) The optical film of claim 28, wherein the optical power tapers from a first value to a second, lesser than the first value along the groove axis from a location on the groove axis arranged to be nearer the input edge to a location on the groove axis arranged to be farther from the input edge.

37. (previously added) An optical film comprising a surface, a first edge and an opposing second edge, grooves formed in the surface extending from the first edge to the second edge, each groove having a groove axis and the groove axes being substantially aligned, optical structures formed on each of the grooves, the optical structures providing optical power to the grooves, and the optical structures having a characteristic that varies

along the groove as a function of the location of the optical structure on the groove between the first edge and the second edge.

38. (previously added) The optical film of claim 37, wherein the characteristic comprises one of the group of characteristics comprising: amplitude, pitch and aspect ratio.

c2 39. (previously added) The optical film of claim 37, wherein the optical structures comprise optical structures selected from the group of optical structures comprising: prisms, lines, dots, squares and ellipses.

40. (previously added) The optical film of claim 37, wherein the characteristic comprises amplitude, and wherein the amplitude varies along the groove axis.

41. (previously added) The optical film of claim 37, wherein variation in the optical structures of adjacent prism grooves is one of in-phase and out-of-phase.

(42. (previously added) The optical film of claim 37, wherein the optical power is arranged to be greater along the groove axis at a location arranged to be nearer the input edge surface.

43. (previously added) The optical film of claim 37, wherein the optical structures comprise discrete optical structures formed in the prism groove.

44. (previously added) The optical film of claim 37, wherein the optical structures comprise continuous structures formed along the length of the prism groove.

45. (previously added) The optical film of claim 37, wherein the optical power tapers from a first value to a second, lesser than the first value along the groove axis from a location on the groove axis arranged to be nearer the input edge to a location on the groove axis arranged to be farther from the input edge.

46. (previously added) A lightguide comprising an input edge and a second edge opposing the input edge and a surface, grooves formed in the surface extending from the input edge to the second edge, each groove having a groove axis and the groove axes being substantially aligned, optical structures formed on each of the grooves, the optical structures providing optical power to the grooves, and the optical structures having a characteristic that varies along the groove as a function of the location of the optical structure on the groove between the input edge and the second edge.

47. (previously added) A method of reducing defects in a light output of a backlight, the method comprising:

providing an optical element in the back light system, the optical element having a surface, a first edge and an opposing second edge, grooves formed in the surface extending from the first edge to the second edge, each groove having a groove axis and the groove axes being substantially aligned, optical structures formed on each of the grooves, the optical structures providing optical power to the grooves, and the optical structures having a characteristic that varies along the groove as a function of the location of the optical structure on the groove between the input edge and the second edge; and

arranging the optical element such that the grooves are aligned substantially perpendicular to a light source of the backlight and in an output path of the light source.

the claim specifies that the groove axes are substantially perpendicular to the input edge surface regardless of the orientation of the lightsource. Applicants note that their invention is not limited by the description of the preferred embodiments set forth in the Specification, but only by the language of the claims. Notwithstanding, as described above in connection with the proposed drawing correction, as shown in the drawings the lightsource 12 and the input edge surface 21 are parallel, so that in the embodiment disclosed in the specification, the groove axes are perpendicular to both the lightsource 16 and the input edge surface 21. The claims are clear, and allowance is warranted.

Withdrawal of the rejection is respectfully requested.

Claims 28-31, 37-40 and 46-47 are rejected under 35 U.S.C. § 102(b) as being anticipated by Wortman et al (US 5,771,328), and claims 32-36 and 41-45 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wortman in view of Suzuki (US 6,088,074). Applicants traverse the rejections and request reconsideration.

Wortman nowhere teaches or suggests prisms with groove axes arranged to be perpendicular to the input edge surface or to the lightsource of an optical system and optical structures formed in the prisms with a characteristic along the groove axis varying from the input edge. The prisms shown in Wortman have a varying characteristic from prism groove to prism groove, but not along the prism groove. Moreover, there is no suggestion of aligning prism grooves with a varying characteristic such that the groove axes are perpendicular to the input edge of the lightguide. For these reasons, claims 28-31, 37-40 and 46-47 are allowable and such action is solicited.

The prism grooves taught in Suzuki likewise do not have a characteristic that varies along the groove axis, and they are not taught to be arranged to have groove axes perpendicular to the input edge of the lightguide or to the lightsource and to have a

characteristic that varies along the groove axis. Thus, neither Suzuki alone or in combination with Wortman teach or support the claimed invention.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

The commissioner is authorized to charge any deficiency in the amount enclosed or any additional fees which may be required to Deposit Account No. 13-2855.

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Respectfully submitted,

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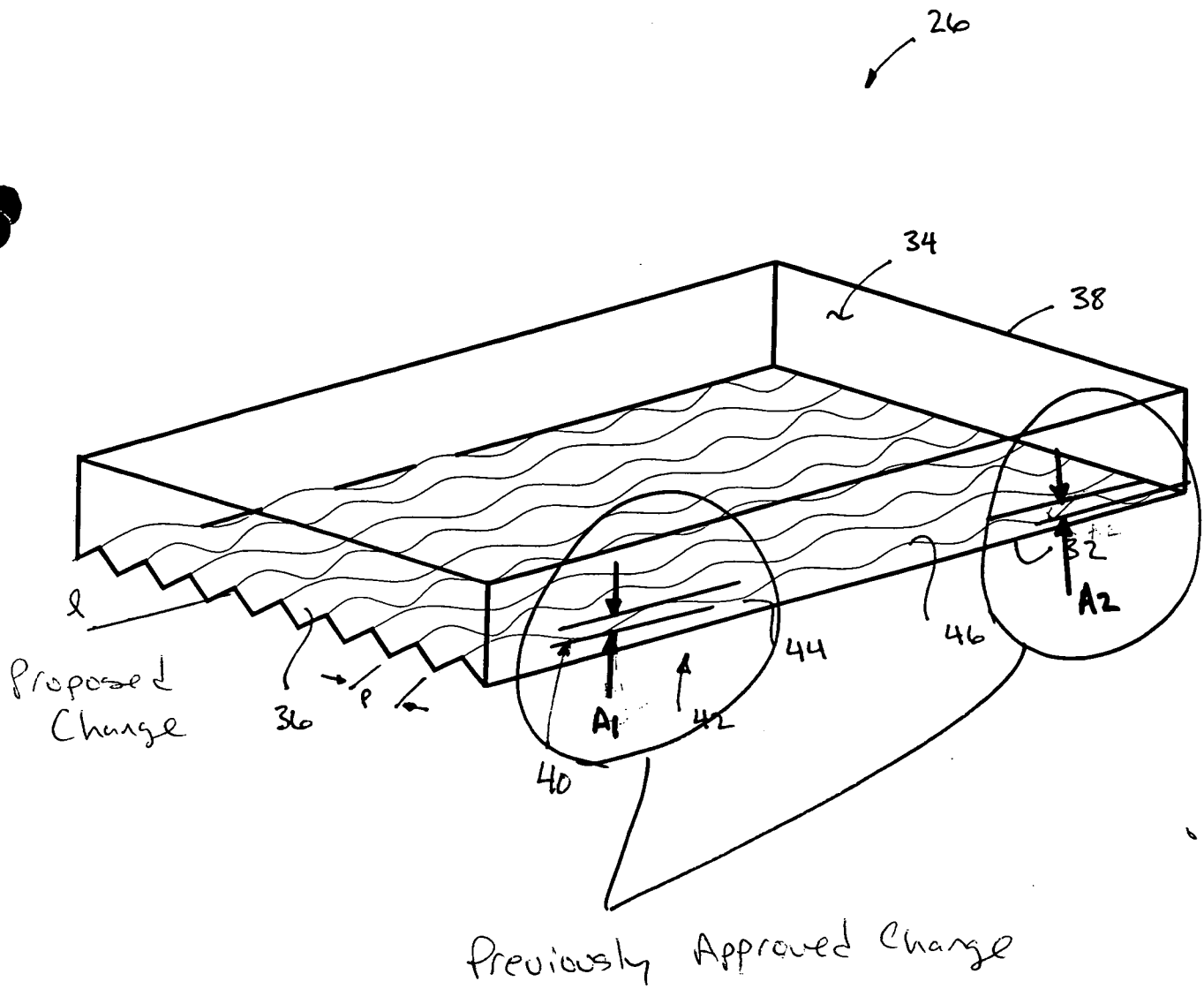


FIG. 2